

Title (en)
INFRASTRUCTURE EVALUATION AND MONITORING USING GROUND PENETRATING RADAR DATA

Title (de)
BEWERTUNG UND ÜBERWACHUNG EINER INFRASTRUKTUR UNTER VERWENDUNG VON ERDDURCHDRINGENDEN RADARDATEN

Title (fr)
ÉVALUATION ET SURVEILLANCE D'INFRASTRUCTURES À L'AIDE DE DONNÉES DE RADAR PÉNÉTRANT LE SOL

Publication
EP 3647827 A1 20200506 (EN)

Application
EP 19205759 A 20191028

Priority
US 201816177224 A 20181031

Abstract (en)
Methods and systems provide infrastructure information including subsurface images captured by ground penetrating radar (GPR) carried by vehicles including mobile data processing devices. Computer readable data further includes location information for the subsurface images based on a location of the vehicle and can include GPS, images and video. The computer readable data can be wirelessly transmitted to a remote server for storage in a database and for retrieval by registered users for display of infrastructure information including subsurface images captured by GPR, based on the received and stored computer readable data. The subsurface images and the location information can be provided for infrastructure where changes are detected based on previously stored infrastructure information related to the location where the subsurface images are captured by GPRs and reported to the server.

IPC 8 full level
G01V 3/12 (2006.01); **G01S 13/86** (2006.01); **G01S 13/88** (2006.01); **G01V 3/15** (2006.01)

CPC (source: CN EP US)
G01C 21/367 (2013.01 - US); **G01C 21/3848** (2020.08 - CN EP US); **G01C 21/3885** (2020.08 - CN EP US); **G01S 13/86** (2013.01 - EP); **G01S 13/885** (2013.01 - EP US); **G01S 13/89** (2013.01 - EP); **G01V 3/12** (2013.01 - EP); **G01V 3/15** (2013.01 - EP); **G05D 1/0257** (2024.01 - US); **G06Q 10/20** (2013.01 - CN); **G06Q 50/26** (2013.01 - CN); **G08G 1/04** (2013.01 - CN); **G08G 1/127** (2013.01 - CN); **H04L 67/025** (2013.01 - CN); **H04L 67/12** (2013.01 - CN); **H04L 67/52** (2022.05 - CN)

Citation (applicant)
US 8949024 B2 20150203 - STANLEY BYRON MCCALL [US], et al

Citation (search report)

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- [Y] US 2006213359 A1 20060928 - VITALE ANTHONY [US], et al
- [Y] EP 2023165 A1 20090211 - TNO [NL]
- [X] RALF BIRKEN ET AL: "VOTERS", KNOWLEDGE DISCOVERY FROM SENSOR DATA, ACM, 2 PENN PLAZA, SUITE 701 NEW YORK NY 10121-0701 USA, 12 August 2012 (2012-08-12), pages 8 - 15, XP058009438, ISBN: 978-1-4503-1554-8, DOI: 10.1145/2350182.2350183

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Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3647827 A1 20200506; CN 111199649 A 20200526; JP 2020076748 A 20200521; US 2020133298 A1 20200430

DOCDB simple family (application)
EP 19205759 A 20191028; CN 201910959023 A 20191010; JP 2019184861 A 20191008; US 201816177224 A 20181031